

1. ANNUAL REPORT OVERVIEW

1.1. INTRODUCTION

This Annual Report describes storm water pollution control activities implemented by MDOT over the past reporting period of January 1, 2005-December 31, 2005 to comply with reporting requirements described in the National Pollutant Discharge Elimination System (NPDES) Permit (No. MI0057364, hereinafter referred to as the Permit) issued by the Michigan Department of Environmental Quality (MDEQ). The Permit, which expires on April 1, 2009, is expected to be reissued in five year cycles thereafter.

The Permit directs MDOT to develop and implement a comprehensive storm water management program designed to reduce the discharge of pollutants from the MDOT drainage systems to the maximum extent practicable (MEP), protect the designated uses of the waters of the state, increase awareness of storm water as a potential source of pollutants, and satisfy the applicable state and federal water quality requirements.

Progress in 2005

During 2005, MDOT made significant strides to promote the fact that storm water management is an integral part of how MDOT operates. MDOT's message, "Together... Better Roads, Cleaner Streams," was spread at conferences and workshops, both internal and external, and through the distribution of visual reminders, such as informational brochures, trash bags, pens, paper pads, and lanyards. "DOT the Drop," MDOT's cleaner streams mascot, debuted in an animated web video, and was incorporated into storm water educational and promotional materials. MDOT spokespersons, employees, and County Road Commissions have all requested more "DOT". A storm water awareness survey was conducted and storm water leaders within MDOT collaborated on storm water-smart procedures.

In addition to MDOT's new storm water efforts, MDOT recognized that many of their existing programs, such as the pollution prevention program, pesticide applicator program, and Soil Erosion and Sedimentation Control (SESC) program, are critical to MDOT's storm water program and should be credited as such. MDOT's efforts this past year have set the groundwork for their progress throughout the remainder of the permit cycle. Overall, MDOT storm water activities are on-track with the schedule they committed to in the Storm Water Management Program (SWMP).

Focus for 2006

Next year's focus will be to reach out to Development Staff in the Transportation Service Center (TSC) and Regions to begin implementing the new procedure for selecting post construction storm water controls. The procedure involves cooperation at an early stage in the project between planning, design, construction, and maintenance staff. Tracking and evaluating newly installed post construction storm water controls will also be emphasized.

Report Objectives

The objectives for this report are as follows:

- To satisfy MDOT's annual reporting requirement of the Permit.
- To evaluate and assess the appropriateness and effectiveness of MDOT's SWMP.
- To provide information regarding the development and implementation of storm water pollution prevention activities conducted in urbanized areas as well as statewide.
- To give updates on activities identified in the SWMP.
- To present information about new programs, changes to current programs and procedures developed by MDOT.
- To document changes to MDOT's fiscal analysis and to summarize annual expenditures and budget information.

1.2. STORM WATER MANAGEMENT PLAN ACTIVITIES

MDOT's SWMP was submitted to the MDEQ in April 2005, following a public review and comment period. This annual report will compare accomplished activities with planned activities written in the SWMP.

This annual report provides information on work that has been performed by MDOT over the course of this reporting period in fulfillment of the six minimum measures defined in the Permit. MDOT has formed separate implementation teams with each team responsible for ensuring the completion of activities for one or more of the six minimum measures. The six team chairs, selected from the MDOT Municipal Separate Storm Sewer System (MS4) Team, are in turn required to provide quarterly updates to the full MS4 Team on their progress. The following are the six teams:

- MDOT Sponsored Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Elimination Program (IDEP)
- Post Construction Storm Water Management Practices (BMP)
- Soil Erosion and Sedimentation Control
- Pollution Prevention/Good Housekeeping

Completed work is detailed in Chapter 2 of this report for each Phase II SWMP activity. Each activity is outlined by the overall objective, timeframe for implementation, and interim milestones and measurable goals. For more details concerning MDOT's SWMP activities, refer to the MDOT Phase II SWMP.

The following provides a brief description of the goals for each team, the highlights of activities completed for this reporting period, and the program focus for the upcoming year. There is some overlap in the responsibilities of the six implementation teams. For example, each team has an education and training component.

1.2.1. MDOT Sponsored Public Education and Outreach

The purpose of public education is to promote and publicize transportation-related storm water education for the job-related and traveling public. Educational information is dispersed through trainings, conference presentations, and educational materials including a brochure, conference displays, a newsletter article, handouts, Connect MDOT (intranet), the MDOT Public Web Site and the MDOT library.

The following activities were completed during 2005:

- A storm water survey was distributed at conferences, workshops, and via e-mail to MDOT Staff affected by storm water issues. The goal of the survey is to determine a baseline awareness of MDOT's storm water program in order to guide future training efforts.
- The MDOT storm water program manager spoke about storm water issues at several internal conferences including the Construction and Maintenance Support Area conferences.
- MDOT's new storm water displays were set up at both MDOT internal and general public conferences and workshops. MDOT's cleaner streams mascot, "DOT the Drop", figurines and other storm water management visual reminders were developed and distributed.
- Education materials and visual reminders produced include a general brochure, pens, lanyards, pads of paper, litter bags, an SESC poster, and a children's display and handout.
- The storm water management Web site was updated on a regular basis. The Web site includes a "What's New" section, "DOT the Drop" animation, illicit discharge demonstration, and links to storm water-related material. Documentation of the number of Web site visits is located in Appendix A.
- Hazardous waste training was conducted in maintenance garages in the University Region.
- Pesticide applicator training and a basic drainage design course were held for applicable MDOT Staff.
- SESC training and sensible salting trainings were held at TSCs throughout the state. This training is also offered to contract counties on a voluntary basis.

The education/outreach focus for 2006 is to continue to broaden the storm water training effort through conference discussions and training, specifically targeting illicit discharge reporting and post-construction BMP design.

Upcoming education and training activities:

- The storm water survey will be compiled and a report will be developed to guide training efforts for job-related public education.
- Hazardous waste training, previously conducted in the University Region, will be expanded to additional regions.
- IDEP training is scheduled for Spring 2006 for region staff involved with illicit discharge issues. The training will help ensure that all MDOT regions are implementing the correct steps to deal with each situation.

- Jeopardy-type trainings will be finalized to assist in training activities and to encourage active participation.

1.2.2. Public Involvement and Participation

Public involvement activities focus on coordinating with local watershed organizations having storm water quality control programs. This coordination is part of context sensitive solutions. Public involvement items also include early coordination with the Michigan Department of Environmental Quality (MDEQ) and the Michigan Department of Natural Resources (MDNR) for input on environmental aspects of early project planning.

The following activities were completed during 2005:

- A Draft Memorandum of Understanding (MOU) for Early Coordination has been developed, identifying triggers for early coordination with the MDEQ - Water Bureau.
- MDOT also has an MOU with the MDNR which addresses early coordination triggers from multiple groups within the MDNR. With these MOUs in place, the agreement process between MDOT, MDEQ, and MDNR would begin 2 to 5 years prior to the start of a project. A form would be included in the project files stating that environmental issues from the MDNR, MDEQ, and MDOT have been resolved. This process will allow all three parties to comment.
- A letter was distributed to Michigan watershed groups encouraging them to review MDOT's Five Year Plan for MDOT projects in their area. The letter also described MDOT's process for accepting input on storm water best management practice requirements through context sensitive solutions (CSS), a collaborative, interdisciplinary approach to project development involving stakeholders that takes into account the natural and social environment.

Actions to be implemented in the upcoming year include:

- The MDOT Bureau of Planning Environmental section is working with the Department of Information Technology (DIT) to create a web-based platform to facilitate early coordination. Project information will be posted and the site will track how many projects were sent for review and how many concurrences or comments were received.
- The success of the early coordination process will be evaluated to determine the need for process improvements in the future.

1.2.3. Illicit Discharge Elimination

IDEP activities include mapping, screening, and investigating MDOT's priority outfalls within urbanized areas of Michigan.

Activities completed during this reporting period include the following:

- An illicit discharge reporting database was developed using Microsoft Access for tracking all reported illicit discharges. Each MDOT region has designated an IDEP coordinator responsible for data entry and follow up. Summary reports can be generated by each region. Use of the database by region staff will begin early 2006.
- Dry weather screening began and the initial screening is complete in many of the urbanized areas. The 2005 year-end dry weather screening status memorandum and outfall maps identifying the locations investigated are located in Appendix B.

- The MDOT Design-Survey group compiled a database with GPS information of statewide outfalls owned and operated by MDOT. The database does not incorporate every MDOT outfall, rather it represents all of the known outfalls statewide. Outfall maps using the survey data are organized by County and are located in Appendix C.

Upcoming IDEP Activities:

- Dry weather screening will continue during 2006. Follow-up screenings will be conducted for outfalls experiencing dry weather flow. The flow will be tracked to the source and removed when identified.
- MDOT will continue to track and work towards eliminating illicit connections as they are identified during the IDEP process or through reports over the course of the next reporting period.
- A procedure will be developed to streamline the process for compiling new outfall survey data from the Design-Survey group and updating the outfall maps annually.
- Section 9.13, *Illicit Discharges into MDOT Storm Water Drainage Systems*, of the Construction Permit Manual will be revised and reissued.
- Region staff will be trained on the use of the IDEP reporting database.

1.2.4. Post Construction Storm Water Management

Activities associated with this team include determining procedures for choosing post construction storm water BMPs, which may be structural, vegetative, or operational, as appropriate. The procedure includes coordination between design, construction, and maintenance staff early in project planning.

The following activities were completed during 2005:

- The MDOT Drainage Manual was updated in 2005.
- A BMP database was created to track existing permanent storm water control structures.
- A procedure was developed for selecting, applying, and maintaining permanent post construction BMPs on specific projects .

Upcoming Activities:

- The Drainage Manual revisions will be distributed.
- New procedures regarding tracking and reviewing permanent storm water BMPs will be discussed with design staff at MDOT TSCs.
- The procedure for selecting, applying and maintaining permanent storm water BMPs will be finalized through a Bureau of Highway Instructional Memorandum (BOH IM).
- The procedure for BMP selection will be discussed at the 2006 Design Support Area Conference.

1.2.5. Pollution Prevention/Good Housekeeping for MDOT

The focus of pollution prevention and good housekeeping activities is on enhancing current activities with the ultimate goal of preventing or reducing pollutant runoff from MDOT operations and properties. Many of these management practices have been in place at MDOT for many years and are described in facility Pollution Incident Prevention Plans (PIPP), procedures manuals, and guides maintained by the Maintenance Support Area and the Construction & Technology Support Area.

The following activities were completed during 2005:

- The PIPP audits for maintenance garages were conducted statewide.
- Environmental reviews and vehicle maintenance checks were conducted in Fall 2005 during MDOT's annual "pumpkin parade" held in preparation for the winter maintenance season.

Upcoming Activities include the following:

- PIPP audit comments will be addressed.
- Pollution prevention practices on construction sites such as project clean-up and proper disposal of bridge painting solvents will be reviewed.

1.2.6. Soil Erosion and Sedimentation Control

SESC activities are fully implemented for MDOT's transportation-related construction and reconstruction projects, and are documented by the Drainage Manual and the Soil Erosion and Sedimentation Control Manual.

The following activities were completed during 2005:

- The draft QA/QC Protocol, now termed the "SESC Program Review", is being evaluated at the region level. Following region review, the draft program will go to the Environmental Committee and the Engineering Operations Committee for approval. Program reviews will be conducted annually in each region and semi-annually at each TSC. This task is on schedule for full implementation in May 2006.
- A BOH IM and special provision for outfall labeling was created in 2005 calling for new outfalls constructed and operated by MDOT to be labeled with the initials 'MDOT'. To-date, over 30 new outfalls have been labeled statewide.
- MDOT Staff that conduct SESC inspections were trained and certified in Part 91 and Part 31.
- MDOT hosted National Highway Institute course number 142054A "Design and Implementation of Erosion and Sedimentation Controls" for 30 staff from MDOT, FHWA and DEQ.

Upcoming Activities include the following:

- The outfall labeling program will be evaluated to determine if it is being conducted appropriately.
- SESC Program Review comments will be addressed.
- An SESC Pocket Guide will be developed to aid SESC inspectors while on-site. The pocket guide will provide tips and reminders for assessing SESC BMPs on a construction

site. This guide will be based on the MDOT SESC Manual and standard specifications and details.

1.3. PROGRAM ASSESSMENT

This section describes the program assessment and financial information for this reporting period.

Chapter 2 of this annual report provides a detailed summary of each activity conducted under the SWMP over the past year. Each activity is described with a schedule, interim milestone(s), and measurable goal(s) in a table. Shaded portions of the table indicate that the milestone or goal has been met while un-shaded portions of the table indicate that the milestone or goal is still active. An explanation of any changes to the activity is included in the summary. Job-related and general public education activities have exceeded the original intent and schedule of MDOT's storm water education plan resulting in a change of strategy to this effort. This is outlined in more detail in Chapter 2, Activity T-1.

Revised Fiscal Analysis

No revisions were made to the fiscal analysis for this reporting period.

Annual Budget

Table 1-1 provides a summary of the past annual expenditures and estimated expenditures for fiscal year 2006. The fiscal year is from October 1st through September 30th of each year. Finalized budget information is also provided for FY 2004 and FY 2005. Financial information is provided for all ongoing municipal separate storm sewer system work in the state. The FY 2006 estimated budget will be updated in the next Annual Report.

Table 1-1 Annual Storm Water Management Program Expenditure and Budget

Fiscal Year	Annual Expenditure
FY 1999	\$142,111
FY 2000	\$1,017,346
FY 2001	\$764,142
FY 2002	\$638,881
FY 2003	\$508,123
FY 2004	\$395,837
FY 2005	\$372,372
FY 2006	*\$575,000
* Budgeted amount for FY 2006.	